

## Adaptive Link Quality Management for Wireless Medium

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## ABSTRACT OF THE DISCLOSURE

To provide the quality and reliability of a fiber optic link over a wireless link, network nodes in accordance with the present invention include a link quality management unit, which controls multiple transmission parameters of a wireless interface in response variable link conditions. For example, the link quality management unit of one embodiment of the present invention controls transmission power, modulation, and error correction. In general, a receiving network node provides feedback to a transmitting network node. Thus, in many embodiments of the present invention, the link quality management unit includes a signal quality detector, which measures a signal quality value, such as bit error rate, signal to noise ratio, or error vector magnitude. The measured signal quality is transmitted back to the transmitting node so that appropriate changes can be made to the transmission parameters.